

IN THE CLAIMS:

1. (Currently Amended) A process for machining ~~said~~ workpieces ~~(6)~~ with a moving laser beam, the process comprising:

holding ~~[[the]]~~ a laser tool that ~~can emit a~~ emits the laser beam by a multiaxial mechanical manipulator at a manipulator hand at a spaced location above the workpiece;

5 moving the laser ~~tool beam~~ along a predetermined path along the workpiece by a displacing motion of the manipulator and during ~~[[a]]~~ the displacing motion of the manipulator; and

superimposing ~~an at least partially oppositely directed~~ a compensating motion of the laser beam to the displacing motion during the ~~machining operation~~ displacing motion with the compensating motion being at least partially oppositely directed to the displacing motion.

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2. (Currently Amended) A process in accordance with claim 1, wherein the workpiece is machined intermittently, while machining phases and transport phases alternate, wherein the point at which the laser beam reaches the surface gets ahead of the laser tool or the low end of a flange system of coordinates at the beginning of a machining phase and trails it at the end of the machining phase.

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3. (Currently Amended) A process in accordance with claim 1, wherein an at least partially transversely directed compensating motion of the laser beam is further superimposed to the displacing motion during the machining operation.

4. (Currently Amended) A process in accordance with claim 1, wherein ~~the~~ a velocity of displacement V_r of the displacing motion of the manipulator displacing the laser tool is greater than ~~the~~ an oppositely directed compensating velocity V_w of the compensating motion.

5. (Currently Amended) A process in accordance with claim 1, wherein ~~the~~ a velocity of displacement the displacing motion V_r of the manipulator displacing the laser tool is greater than ~~the~~ a machining velocity V_s of the laser beam at the workpiece .

6. (Previously Presented) A process in accordance with claim 1, wherein the compensating motion of the laser beam is an angular motion.

7. (Previously Presented) A process in accordance with claim 1, wherein the compensating motion of the laser beam is performed by a pivoting motion of the manipulator hand about one of its said hand axes.

8. (Previously Presented) A process in accordance with claim 1, wherein the laser tool is held by means of an extension arm at a spaced location from the manipulator hand .

9. (Previously Presented) A process in accordance with claim 1, wherein the compensating motion of the laser beam is performed by a mobile scanning means at the laser tool.

10. (Currently Amended) A process in accordance with claim 1, wherein the laser beam is directed toward the workpiece at the beginning of machining with an obliquely forwardly directed beam angle α α' .

11. (Previously Presented) A process in accordance with claim 1, wherein the laser beam is directed toward the workpiece at the end of the machining with an obliquely rearwardly directed beam angle β , β' .

12. (Currently Amended) A process in accordance with claim 1, wherein the manipulator performs an [[,]] essentially constant displacing motion during the machining.

13. (Currently Amended) A process in accordance with claim 1, wherein the manipulator performs an $[[,]]$ essentially constant or accelerated displacing motion during the transport phases between the machinings.

14. (Currently Amended) A device for machining ~~said~~ workpieces with a moving laser beam, the device comprising:

a laser tool held by a multiaxial mechanical manipulator at a manipulator hand, said laser tool being movable along a preset path during a displacing motion of the manipulator and
5 being controlled for moving the laser tool along the predetermined path along the workpiece
by the displacing motion of the manipulator during the displacing motion of the manipulator.

the manipulator having a means for generating a compensating motion of the laser beam, which said motion takes place during the machining operation and is directed opposite and is superimposed to the displacing motion and includes superimposing the at least partially oppositely directed compensating motion of the laser beam to the displacing motion during the machining operation.

15. (Previously Presented) A device in accordance with claim 14, wherein the manipulator has a multiaxial manipulator hand, in which at least one said hand axis can be controlled independently from the displacing motion.

16. (Previously Presented) A device in accordance with claim 14, wherein the laser tool is mounted on the manipulator hand by means of an extension arm that creates a distance.

17. (Previously Presented) A device in accordance with claim 14, wherein the laser tool has a focusing optical system for generating a fixed-angle laser beam .

18. (Previously Presented) A device in accordance with claim 14, wherein the laser tool has a fixed focal distance.

19. (Previously Presented) A device in accordance with claim 14, wherein the laser tool has a focal distance of approx. 150 mm to 400 mm.

20. (Previously Presented) A device in accordance with claim 14, wherein the laser tool has a mobile, controllable scanning means.

21. (Previously Presented) A device in accordance with claim 14, wherein the manipulator is designed as a, at least six-axis articulated-arm robot.

22. (Previously Presented) A device in accordance with claim 14, wherein the laser tool is designed as a welding tool.

23. (Previously Presented) A process in accordance with claim 2, wherein an at least partially transversely directed compensating motion of the laser beam is superimposed to the displacing motion during the machining operation.